

**SAMPLE- Template for Describing Regional IWM Investment Packages
And Supporting Assumptions for Update 2013 Finance Plan
December 12, 2011**

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Note to Reader: This version of the draft template is populated with sample entries and only valid for discussions during the December 12, 2011 Finance Caucus meeting

This template is to compile Integrated Water Management Investment Packages -- activities and supporting assumptions of future conditions -- for the Update 2013 Finance Plan as described in Component 2 of the finance plan storyboard. This information will be used to facilitate discussion and develop recommendations regarding future State government funding for State-administered activities as well as State financial assistance for regional and/or local IWM activities as described in Component 5 of the finance plan storyboard. Each permutation of this template constitutes one "Investment Package". Multiple investment packages can be created using various sets of future assumptions and IWM activities. The section title blocks below are color coded to correspond with the flow diagrams shown in Figures 2 and 3 for State and Regional IWM investment packages, respectively.

During the preparation of the Update 2013 Finance Plan, funding recommendations will be developed by:

- (1) Observing emerging patterns of common activities/geographical areas from the various regional and State government investment packages (which include local assistance) as guidance for where, and to what magnitude, future State IWM funding should be directed.
- (2) Ensuring consistency between the IWM benefits (type and magnitude) defined for the Update 2013 Finance Plan and anticipated benefits from IRWM activities.

Recommendations will be developed for State-administered activities, which generally provide broad public benefits, as well as activities at the scale of the Water Plan's 10 hydrologic regions and 2 overlay areas.

Investment Package Title: Sample IRWM 1

Information Base

Planning Entity:	Sample IRWM Group
Report Type:	Integrated Regional Water Management Plan
Date Published:	2010
Website:	http://www.sampleirwm123.org

Scenario Assumptions

An initial step for developing a State or Regional Investment Package is specifying a number of assumptions about future conditions. The framework for preparing the finance plan includes a process for specifying priorities at various scales (e.g. regional or statewide) and under different sets of assumptions about future conditions; such as society's future willingness and ability to pay for IWM activities, the planning horizon for each investment package, as well as demographic, land use, growth, and climate conditions.

Willingness and Ability to Pay – This section contains the method for specifying assumptions regarding society's future willingness and ability to fund IWM activities as well as the planning horizon. The purpose is to document the assumptions about future funding magnitude and revenue sources, and to examine internal consistency with planned IWM activities (which are listed in the *Response Package/IWM Activities* section of this template).

Specify a funding level for each jurisdictional scale in the table below

Jurisdictional Scale	Planning Horizon (Specify 2015, 2020 OR 2030)
	2030
IRWM	3
State	4 (75% of total funding is expected from State sources)
Federal	3
Tribal	2
Private	2

Menu of Alternative Future Funding Levels

Level 4 — Flourishing economy and strong investment climate conducive to full implementation of all recommendations contained in *Information Base* identified above

Level 3 — 2010 (current condition with 2012 bond)

Level 2 — 2010 (current condition without bond) – similar to year 2000

Level 1 — Low resources, all-time low infrastructure investment profile

Scenario Narrative: *(Brief story describing the economic, climate, societal, demographic and other drivers that result in the assumed future condition)*

Willingness and Ability to Pay: A general recovery of the economy will occur by 2015; particularly at the State-level

Climate Change: Sea levels will rise X feet by 2050; minimal increase in peak flood flows; moderate increase in inter-annual hydrologic variability; significantly reduced snowpack; significant increase vegetative consumptive use

Population: DOF projections with local modifications driven by city and county general plans

Other Important Assumptions:

Resources Management Objectives

Regardless of the variability of scale and level of detail (e.g. local, regional, statewide, quantitative, qualitative, project-level or strategic-level), the resource management objectives need to be specified as a basis for selecting a set of IWM activities; and to ensure that the activities would meet one or more of the IWM Benefits (i.e., are within the scope of the finance plan). This section of the template is for specifying in a uniform way the resource management objectives, bridging objectives with their associated IWM benefits, performance measures, and reporting metrics to track and measure “success” in meeting the stated objectives. This table will also be used to specify which benefits are targeted, and which are not, under a set of priorities for each scenario.

Objectives <i>(High level expression of components of future strategic vision – do not include activities)</i>	Associated IWM Benefits <i>(See benefit definitions for more details)</i>	Level of Consistency with Update 2009 Strategic Plan and Objectives <i>(Minimal, Moderate or Significant)</i>
Preserve and enhance the environment	<ul style="list-style-type: none"> • Environmental 	Significant
Promote sustainable water solutions	<ul style="list-style-type: none"> • Environmental • Water quality 	Significant
Provide reliable local water supply	<ul style="list-style-type: none"> • Supply Reliability (local) 	Moderate

The information summarized below is designed to shift planning focus *from* actions/activities (such as resource management strategies; RMS) *to* desired outcomes such as sustaining ecosystems or economic activities. For example, all of the resource management strategies in Update 2009 (storage, conveyance, conservation, ag land stewardship) are actions/activities, but they are not resource management objectives. Also, RMS implementation targets are not resource management objectives; based on presumed benefits. Identifying benefits requires complex system-wide modeling and/or data collection to factor in many important variables such as how actions interact with the system, how and where they are implemented and operated, how they are funded and how the benefits (or impacts) are distributed among stakeholder interests. The information summarized below will help keep the focus on the desired outcomes rather than just the actions and it will feed into the analytical tools for subsequent Water Plan Updates to identify implementation effects and trade-offs by:

- (1) Enhancing understanding of regional resource management interests and values; and
- (2) Guiding quantitative and qualitative analyses to check if State IWM investments (i.e. activities) are meeting their stated objectives.

Evaluation Criteria (<i>These are categories of desired outcomes related to stakeholder interest</i>)	Reporting Metrics (<i>Specific modeling output or measured outcomes that indicate the trade-offs associated with each evaluation criterion</i>)
Provide water supply benefits	a. Reduction in imported water (in acre-feet per year) b. Percent of IRWM area implementing water use efficiency
Provide restoration and flood management benefits	Number of acres of new or restored habitat or flood plain protected
Provide water quality and salt management benefits	a. Volume of water treated (acre-feet/year or mgd) b. Mass of salt or contaminants removed (tons/year).

Response Package/IWM Activities

This section describes the IWM activities that are selected in response to the future assumptions and resource management objectives described above. It also includes the total upfront capital investment, as well as present value (2010 dollars) of operation and maintenance costs, for estimating funding needed over the stated planning horizon.

The information summarized below also represents one permutation of a Response Package (defined in the Water Plan as a mix of actions and policies intended to meet multiple resource management objectives that are packaged/coordinated to achieve enhanced outcomes).

Priority Activities (Project or Program) Name	Total Funding (Capital and Present Value of O&M through Planning Horizon) \$ 2010 Dollar Basis	Activity Category	Scale of Benefits by Jurisdiction or Geographical Area	Nexus with Update 2013 IWM Benefits
INFRASTRUCTURE				
Sandy Creek Canal Lining	2,000,000	Human/Built	Local	<ul style="list-style-type: none"> • Supply reliability • Operational Efficiency • Energy
Dry Gulch Revitalization	1,500,000	Natural	Regional	<ul style="list-style-type: none"> • Environmental • Water Quality • Recreation
Phase 1 – Thirsty Acres GW Recharge Facility Development	9,000,000	Human/Built	Regional & Inter-regional	<ul style="list-style-type: none"> • Supply reliability • Overdraft reduction • Reduced Flood Risk
Ducks Galore Wetland Restoration	1,200,000	Natural	Regional and Statewide	<ul style="list-style-type: none"> • Environmental • Recreation
INNOVATION				
Planning & Integration Project	150,000	Planning and Public Process Improvements	Regional	Increases certainty of achieving objectives
GIS Land Use and Ecosystem Mapping Tool	200,000	Information technology/data and tools	Watershed	Increases certainty of achieving objectives
Outreach to Expand IRWM Plan Group	100,000	Governance	Regional and Local	Increases certainty of achieving objectives

Investment Package

Total Costs by Activity Category and Scale of Benefits Over Planning Horizon

Scale of Benefits	Total Funding (Capital and Present Value of O&M through Planning Horizon) <i>\$ 2010 Dollar Basis</i>
INFRASTRUCTURE – HUMAN/BUILT	
GW Basin	\$
Local	\$\$\$
Watershed	\$\$
Regional	\$
Inter-regional	\$\$
Statewide	\$\$
Tribal	\$
International	\$
Infrastructure Subtotal	\$
INNOVATION	
Governance	\$
Planning and Public Process Improvements	\$\$\$
Information Technology/Data and Tools	\$\$
Water Technology Research and Development	\$
Innovation Subtotal	\$
Total	\$

**Process for Recommending State Investment
in Integrated Water Management (IWM) Activities**
Figure 1

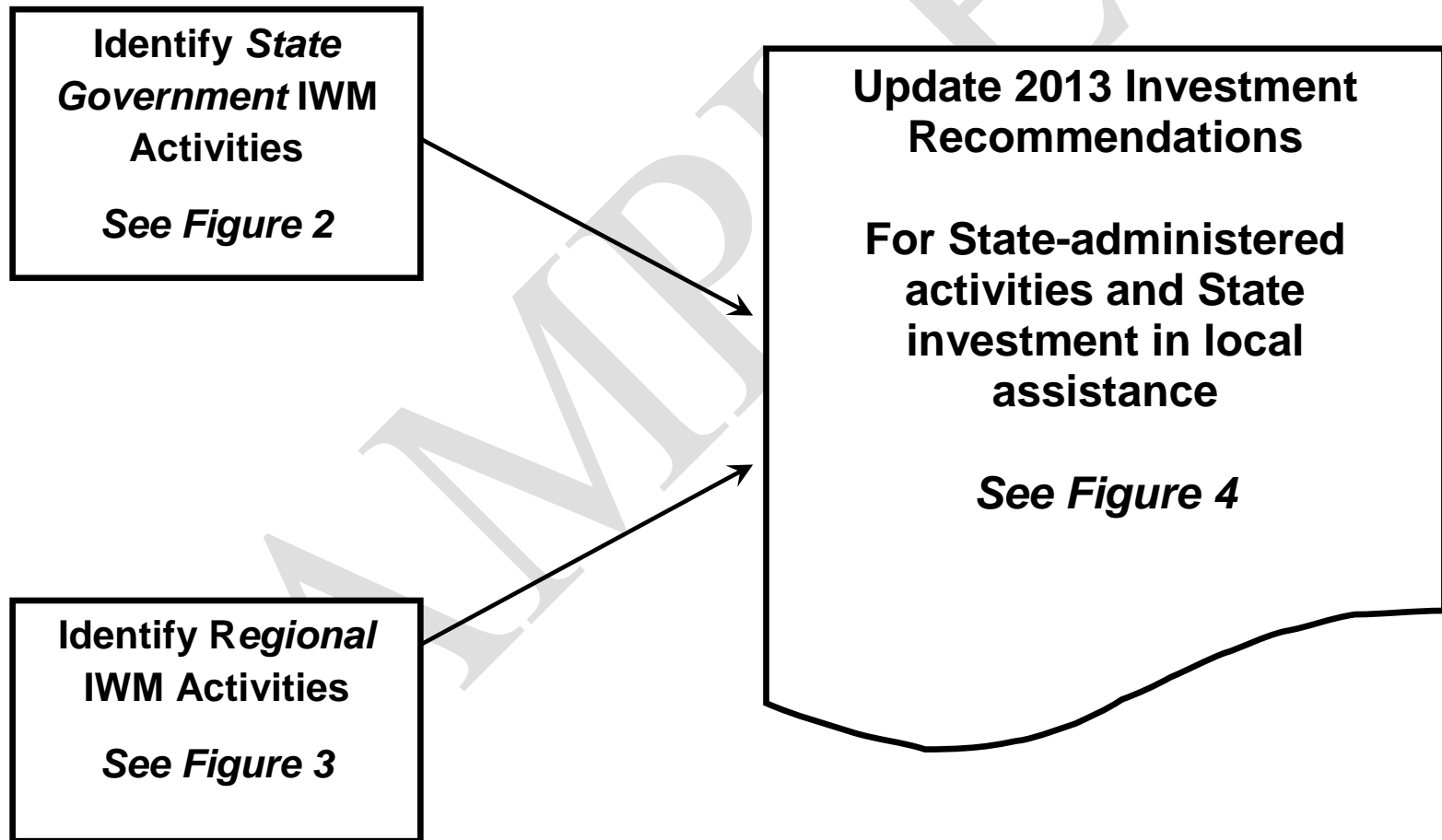
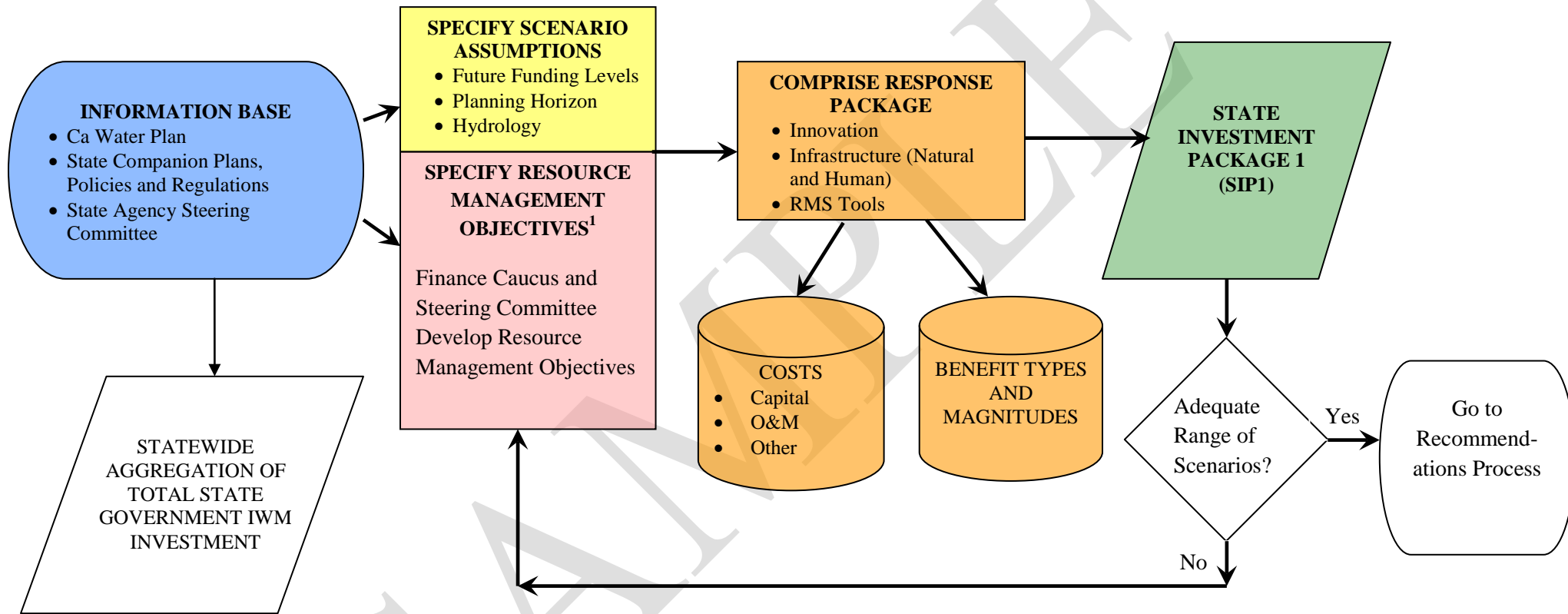
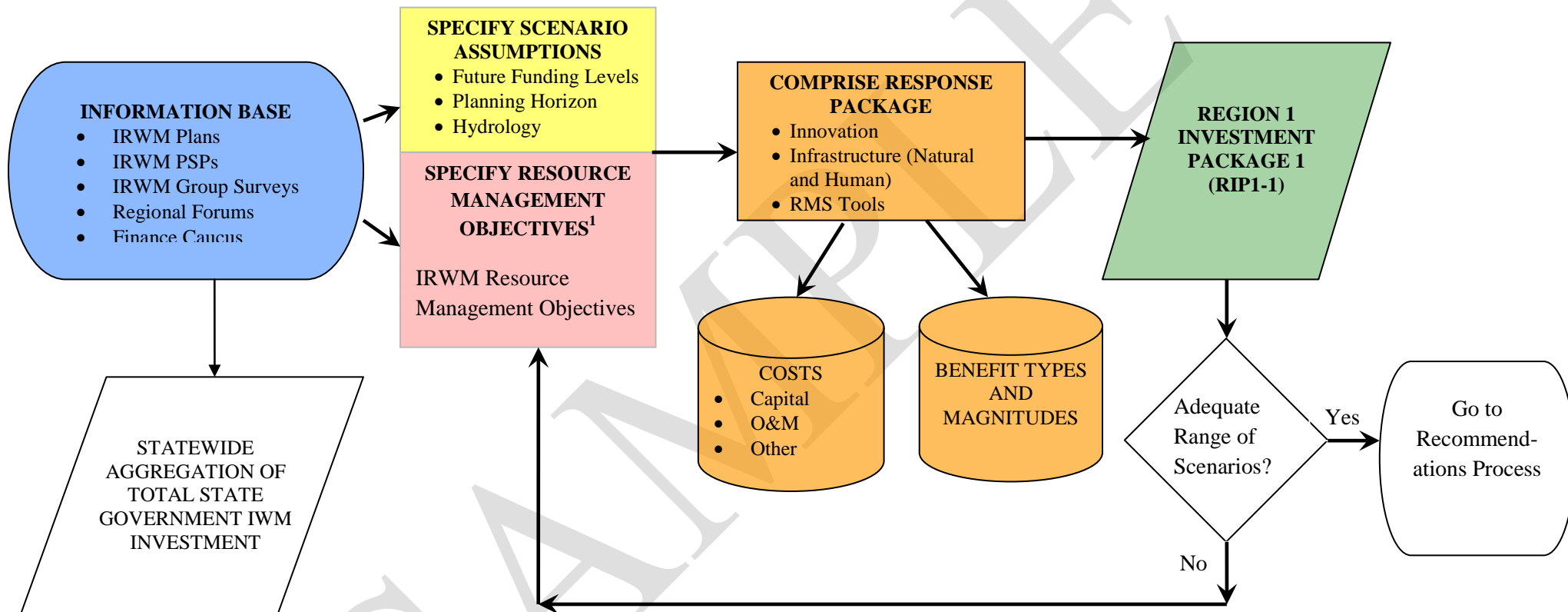


Figure 2 - State Government Activities
Flowchart for Component 2 of the Finance Plan Storyboard



- (1) Stakeholders can develop multiple, alternative sets of objectives that reflect the diversity of priorities and preferences across interests.
- (2) Scenario Objectives for State Government activities will be developed through the Finance Caucus and other collaborative venues and may include Update 2009 Strategic Vision/ Objectives, other State resource management objectives, public and/or non-public benefits from regional activities, etc

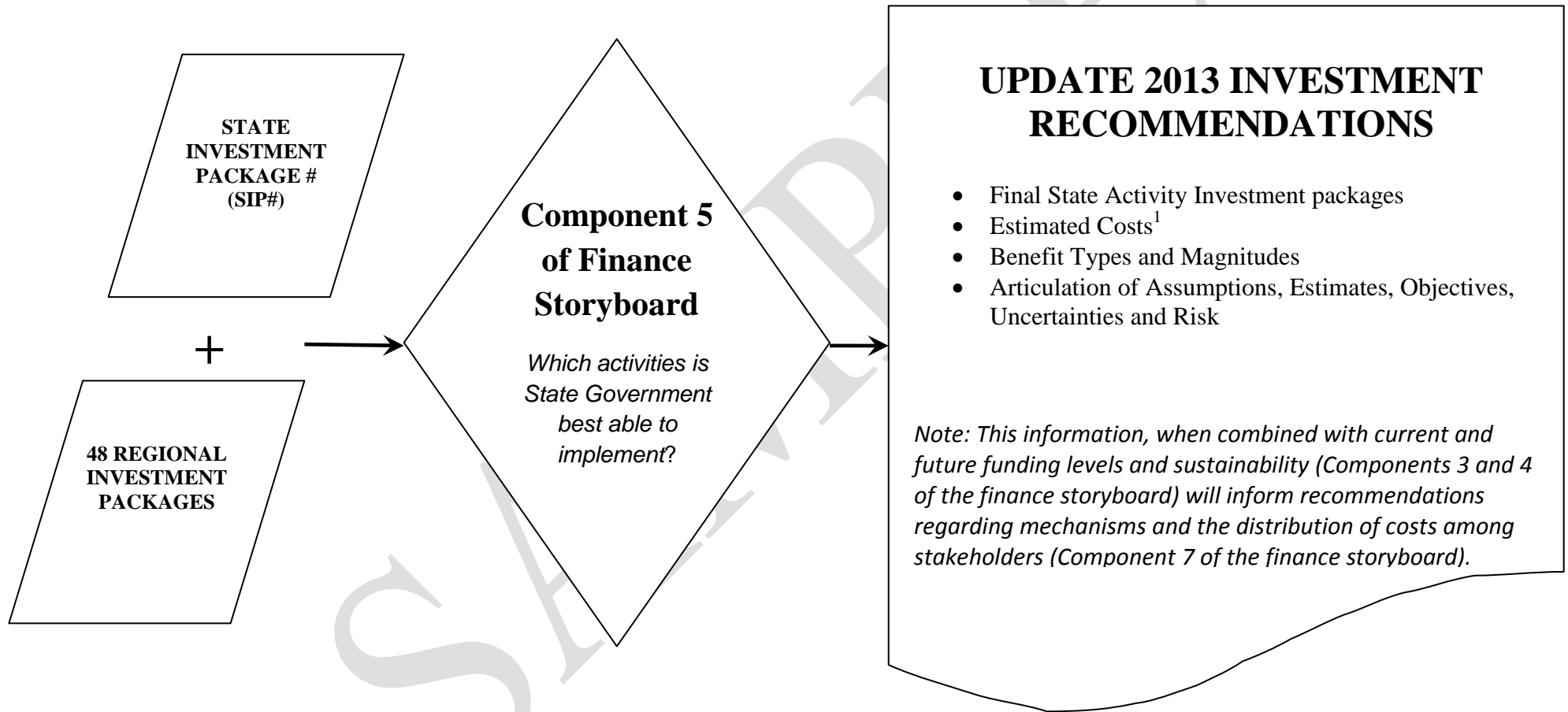
Figure 3 - Regions' Integrated Regional Water Management Activities
Flowchart for Component 2 of the Finance Plan Storyboard



(1) Recommendations for the State Government's future funding of IRWM activities (Partially achieves Storyboard Component 5) will result, in part, from observed patterns of activities/places among multiple activity package permutations.

(2) This achieves a portion of Storyboard Component 6 – *How much will the State Governments future role cost?*

Figure 4 - Update 2013 Investment Recommendations Process
(State-Administered Activities; including Local Assistance)
Flowchart for Component 2 of the Finance Storyboard



(1) This achieves a portion of Component 6 of the finance storyboard, which asks: How much will the State government's future role cost?